

Work Order ID 136232

Friday, August 28, 2015 2:23:44 PM

136232

Page 1

Item ID: 646.3310

Accept

N900040100

Setup Start *NS1*

Revision ID:

Stop *NS2*

Item Name: LH Half

Start Date: 8/31/2015 Start Qty: 4.00

4

Cust Item ID:

Required Date: 8/31/2015 Req'd Qty: 4.00

4

Customer:

Reference:

Approvals:

Process Plan: SP1/22

Date: 0150901

Tooling:

Date:

Run Start *NR1*

QC:

Date:

SPC (Y/N):

Date:

Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr

Revision Nbr

646.3300

N/C3

110

0.01

110

HAAS CNC VERTICAL MACHINING #1

HAAS 1

Memo

0.04

HAAS CNC vertical machine #1

1-Machine per folio FB154

DWG REV: N/C3

FOLIO REV: AT

Blank 13.375

2- deburr and break all sharp edges

120

0.00

120

QC2- Inspect parts off machine FAI/FAIB

QC

Memo

0.00

Quality Control

4 0 15/10/02

4 0 15/10/01

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QS1042) Approval		
Description Work Order Deviation				Disposition				Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER :							
Misidentified ☐	Past Due ☐								

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐						OTHER : _____	

Work Order ID 136232***136232***

Page 3

Friday, August 28, 2015 2:23:44 PM

Item ID: 646.3310

Accept

N900040100

Setup Start

NS1

Revision ID:

Stop

NS2

Item Name: LH Half

Start Date: 8/31/2015 Start Qty: 4.00

4

Cust Item ID:

Required Date: 8/31/2015 Req'd Qty: 4.00

4

Customer:

Reference:

Approvals:

Process Plan: _____

Date: _____

Tooling: _____

Date: _____

Run Start

NR1

QC: _____

Date: _____

SPC (Y/N): _____

Date: _____

Stop

NR2Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

155

QC5- Inspect part completeness to step on W/O

0.00

155

QC

Memo

0.00

Quality Control

DAS
38
9-89

OCT 15 2015

180

Identify as per dwg & Stock Location: CCF022

0.00

180

Packaging

Memo

0.00

Packaging

IDENTIFY AS PER APICAL MPP-120 BY STAMPING P# AND REV

DAS
6
9-89

OCT 26 2014

190

QC21- Final Inspection - Work Order Release

0.00

190

QC

Memo

0.00

Quality Control

OCT 26 2015

20151028

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QS1042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐		Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐					
OTHER : ☐									

Picklist Print

Friday, August 28, 2015 1:54:00 PM

Page 1

Work Order ID: 136232

136232

Parent Item: 646.3310

646.3310

Parent Item Name: LH Half

Start Date: 8/31/2015

Required Date: 8/31/2015

Start Qty: 4.00

Required Qty: 4.00

Comments: IPP REV:A NEW ISSUE 12/11/17 JFS VERIFY BY: JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M7075T6B7.000X2.000		Purchased	No				f	6.0000		4.694737			

M7075T6B7 000X2 000

7075-T6 BAR 7.000" X 2.000" (order in billets)

WSP
15/10/01

Location

Loc Qty

Loc Code

MAT024

6

m130760

6

4

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation			Disposition		
			Completed By		
			Lead hand / Supervisor Approval Verification		
			QC / QA Coordinator Approval		
Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐
OTHER : _____					

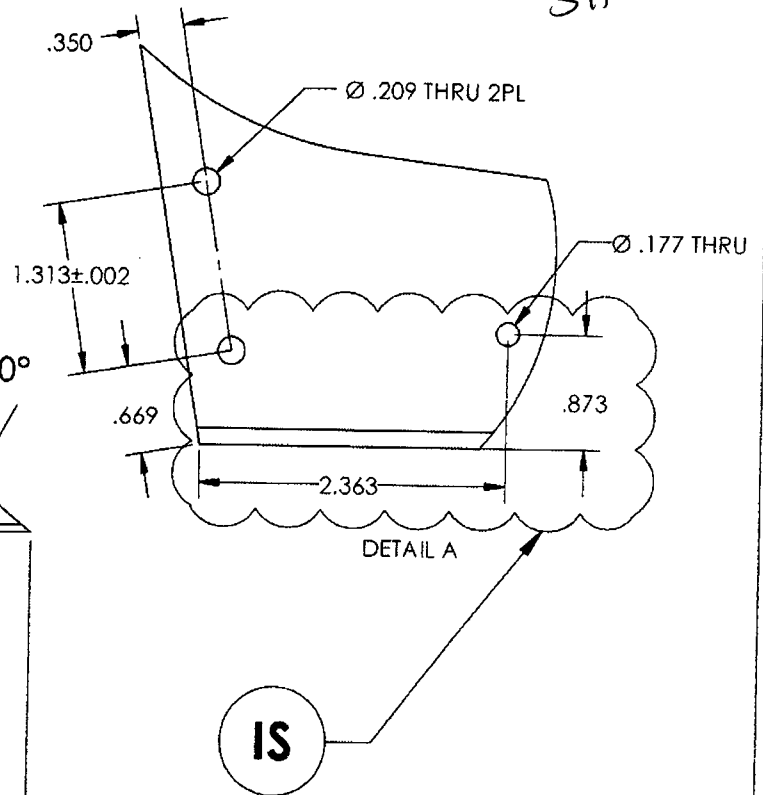
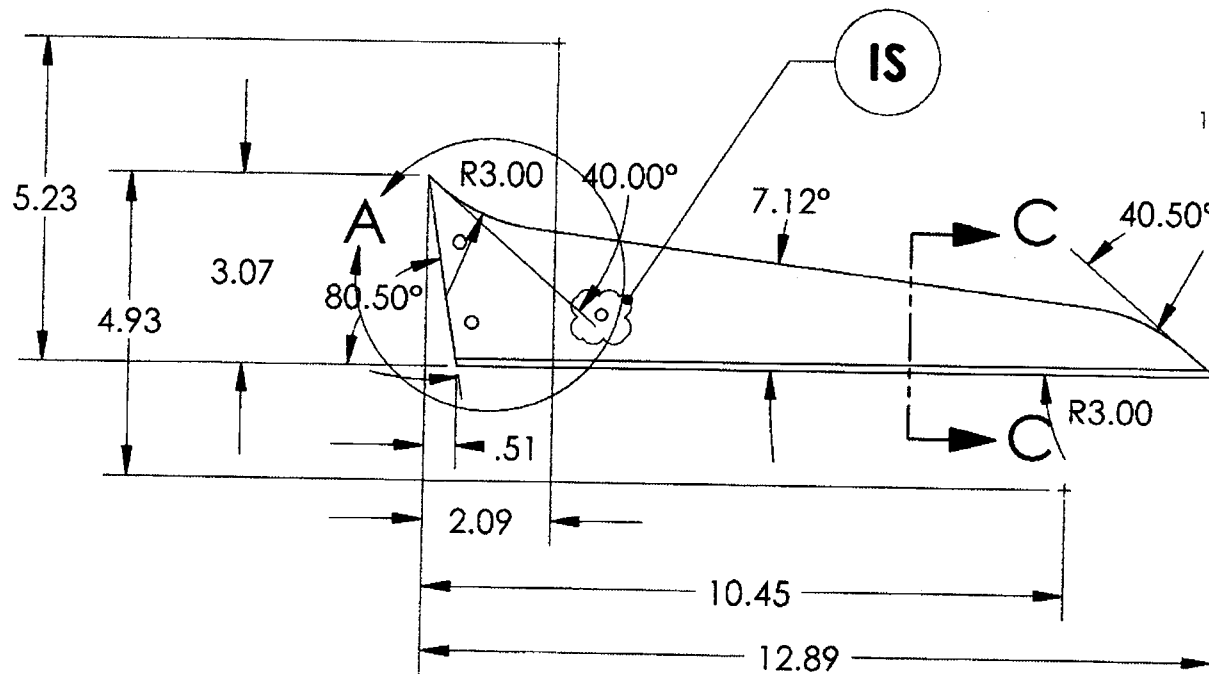
APICAL
INDUSTRIES, INC.

ENGINEERING CHANGE NOTICE NO.		04765		SHEET 1 OF 1	
DWG NO.	646.3300	REV:	NC	PREPARED BY	J. SOTO
DATE:		12/08/2014		EFFECT ON DWG ☐ INC. ☒ UNINC.	
DWG TITLE: UPPER CUTTER ASSY					
APPROVED BY:	ENGR. <i>[Signature]</i>	MFG. <i>[Signature]</i>	QC <i>[Signature]</i>	EFF. NEXT ORDER	
REASON: ADDED HOLE DIMENSION TO 646.3313.					

TRANSACTION CODES (TC):
A-ADD C-CREATE
R-REVISE D-DELETE

SHEET 5 IS:

20150901
136232
SH



DOCUMENTS EFFECTED:

☐ MDL ☐ INSTALL INSTRUCTIONS ☐ ICA ☐ FMS ☐ BOM

CHANGE CATEGORY

☐ MAJOR ☒ MINOR

DER REVIEW REQUIRED

☐ YES ☒ NO

APICAL
INDUSTRIES, INC.

ENGINEERING CHANGE NOTICE NO. 03724

SHEET 1 OF 1

DWG NO. 646.3300

REV: N/C

PREPARED
BY B. PETERS

DATE: 12/05/12

EFFECT ON DWG
☐ INC. ☒ UNINC.

DWG TITLE: UPPER CUTTER ASSY

APPROVED BY: ENGR *[Signature]*

MFG *[Signature]*

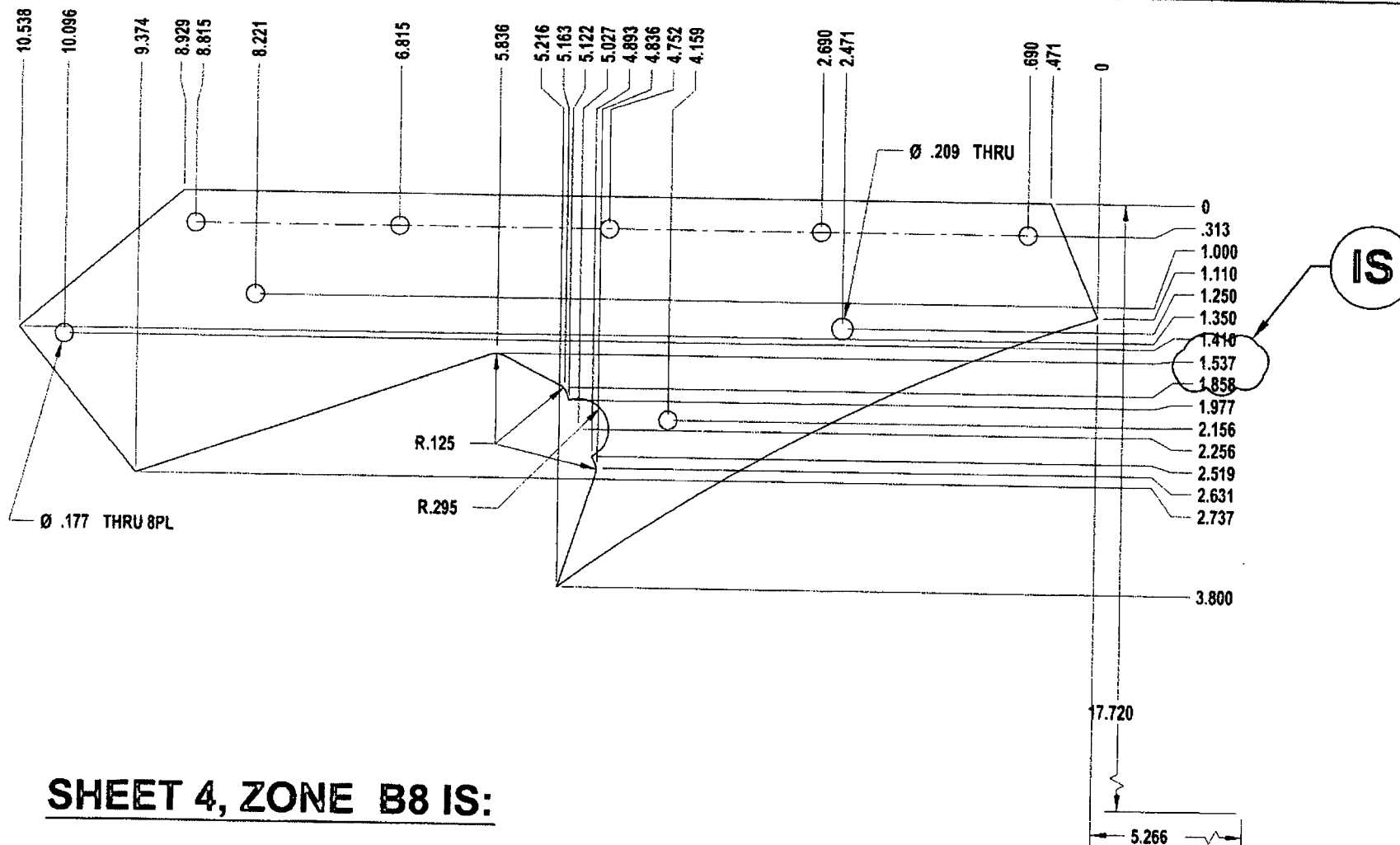
QC

EFF: NEXT ORDER

TRANSACTION CODES (TC):
A-ADD C-CREATE
R-REVISE D-DELETE

REASON: REVISED ORDINATE DIMENSION.

ECR: D-12-025



SHEET 4, ZONE B8 IS:

DOCUMENTS EFFECTED:

☐ RFMS ☐ MDL ☐ INSTALL INSTRU ☐ ICA ☐ BOM

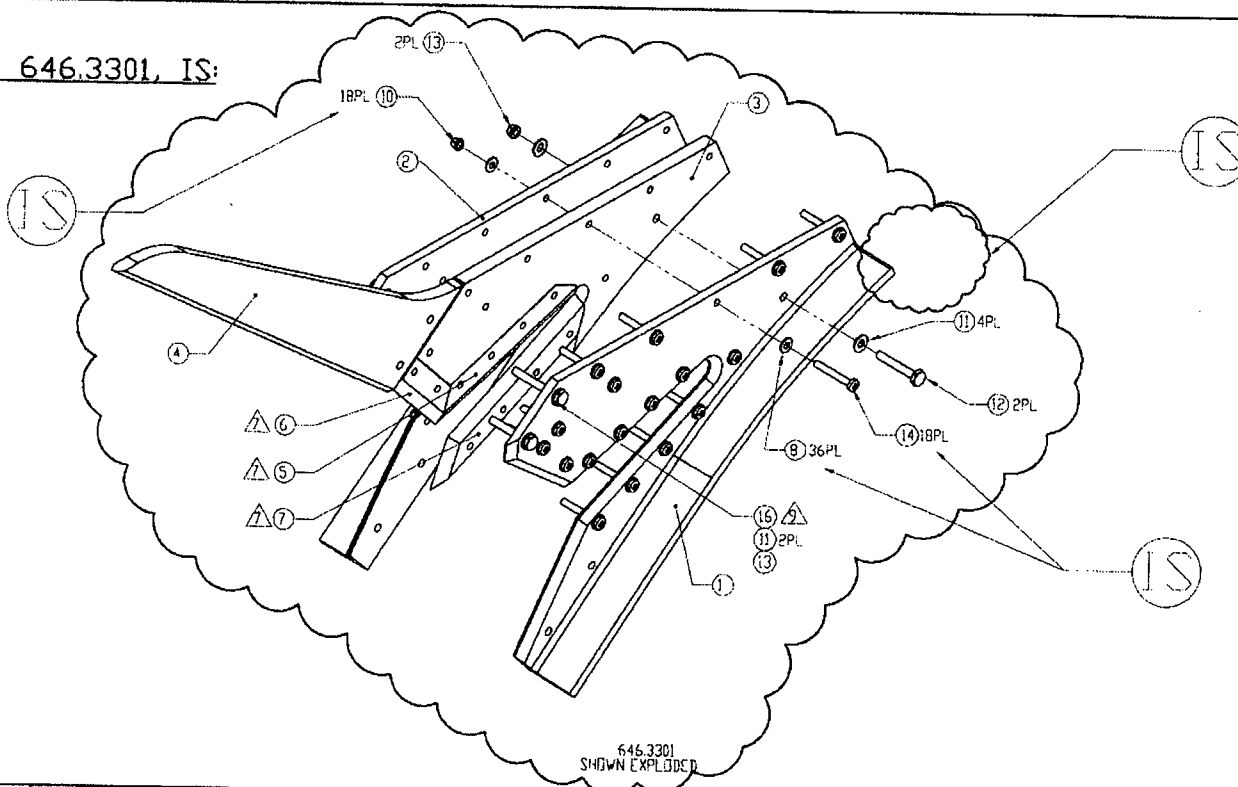
CHANGE CATEGORY
☐ MAJOR ☒ MINOR

DER REVIEW REQUIRED
☐ YES ☒ NO

APICAL
INDUSTRIES, INC.

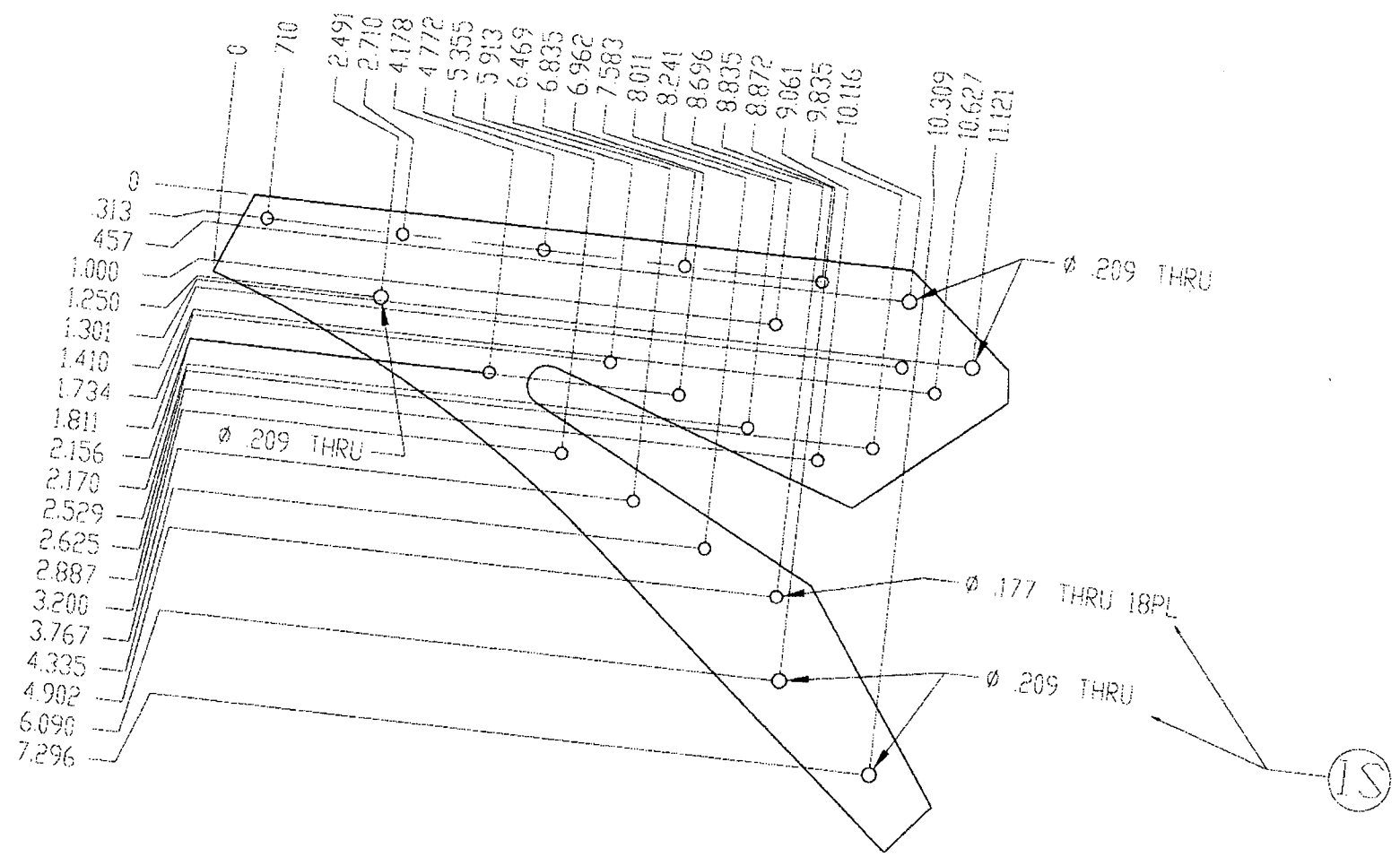
ENGINEERING CHANGE NOTICE NO.		02196		SHEET 1 OF 2	
DWG NO.	646.3300	REV: N/C	PREPARED BY	S. HUFF	DATE: 01/05/09
DWG TITLE:		UPPER CUTTER ASSY			
APPROVED BY:	ENGR <i>[Signature]</i>	MFG	<i>[Signature]</i>	QC	<i>[Signature]</i>
TRANSACTION CODES (TC): A-ADD C-CREATE R-REVISE D-DELETE		REASON: REMOVED RIVETS IN FAVOR OF ADDITIONAL SCREWS			
		EFFECT ON DWG ☐ INC. ☒ UNINC.		EFFECT NEXT ORDER	

SHEET 1, VIEW 646.3301, IS:



14	R	601.2765		18	SCREW	MS27039-0819
10	R	601.1541		18	LOCKNUT	MS21042L08
9	D	601.2766		3	RIVET	MS20470AD5-18
8	R	601.2764		36	WASHER	NAS1149FN832P
				3301		
F/N	TC	PART NUMBER	QTY	DESCRIPTION	MATERIAL/SPECIFICATION	
DOCUMENTS EFFECTED:						CHANGE CATEGORY
						DER REVIEW REQUIRED
						☐ YES ☒ NO
						☐ MAJOR ☒ MINOR

SHEET 3, SECTION VIEW A-A, IS:

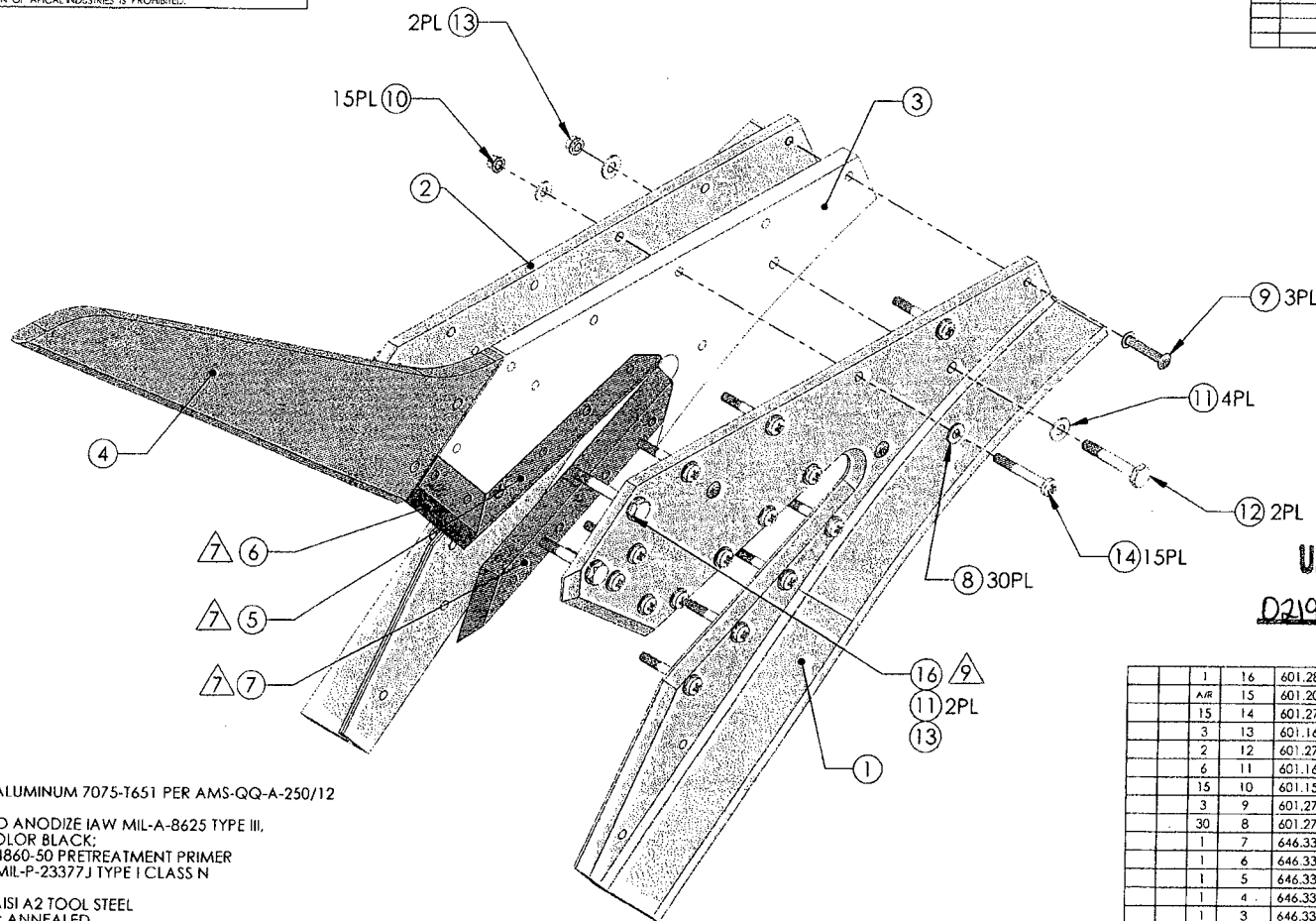


SECTION A-A

C	PART NUMBER	QTY	DESCRIPTION	MATERIAL/SPECIFICATION

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REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED



UNINCORPORATED ECN(S)

02196, 03724, 04765

NOTES:

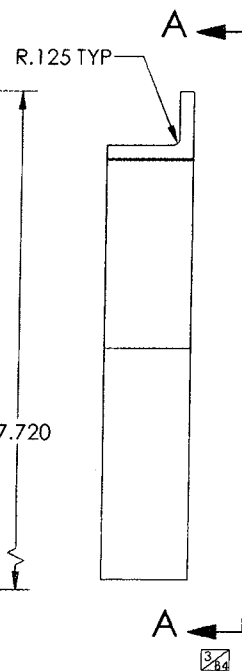
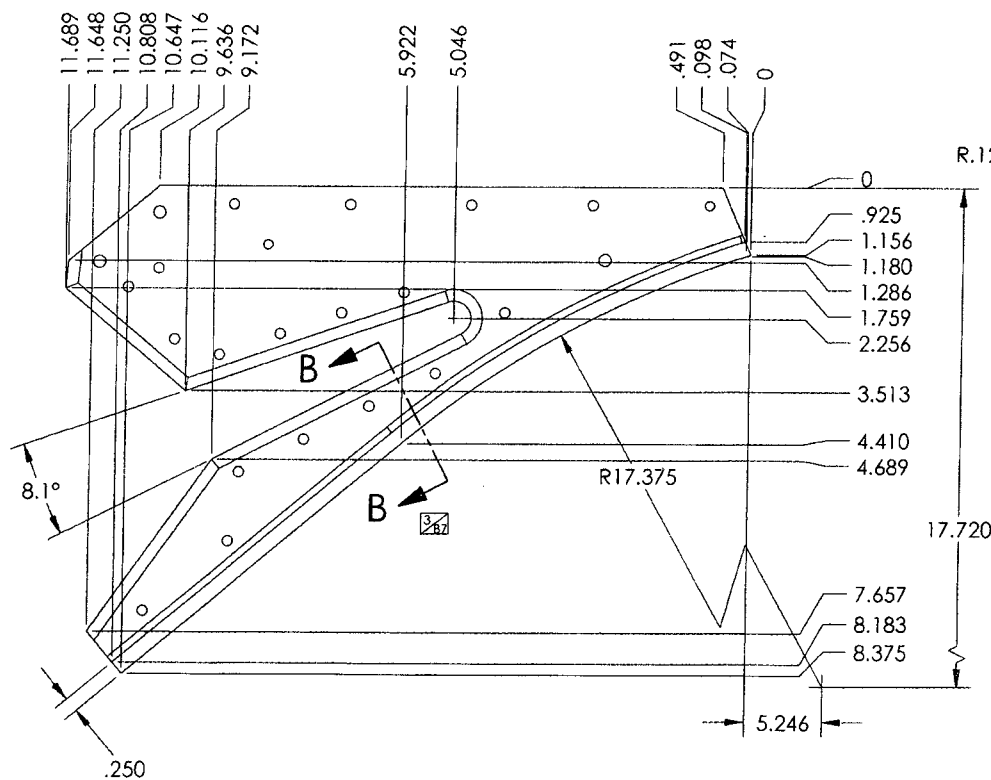
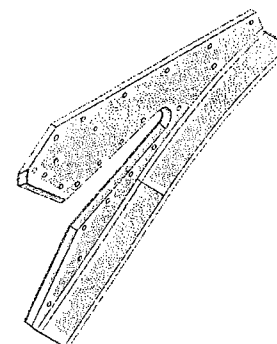
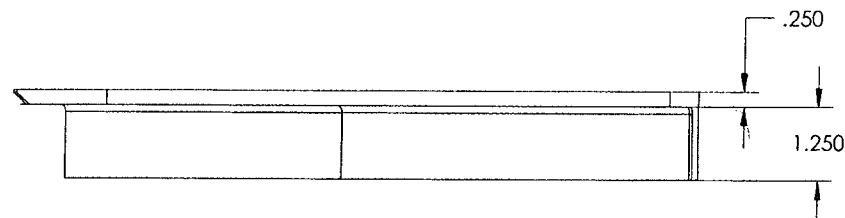
- 1 MATERIAL: ALUMINUM 7075-T651 PER AMS-QQ-A-250/12
- 2 FINISH: HARD ANODIZE IAW MIL-A-8625 TYPE III, CLASS 2, COLOR BLACK; CARDINAL 4860-50 PRETREATMENT PRIMER PRIME IAW MIL-P-23377J TYPE I CLASS N
- 3 MATERIAL: AISI A2 TOOL STEEL
CONDITION: ANNEALED
POST PROCESS: HEAT TREAT TO 58-62 Rc ROCKWELL HARDNESS
- 4 FINISH: PRIME IAW MIL-P-23377J TYPE I CLASS N
5. DEBURR AND BREAK ALL SHARP EDGES EXCEPT WHERE OTHERWISE NOTED
6. IDENTIFY IAW MPP-120
- 7 APPLY F/N 15 AS REQUIRED TO ALL FAYING SURFACES OF F/N 5, 6 & 7 UPON ASSEMBLY
- 8 CUTTING EDGE INTENDED TO BE SHARP, DO NOT BREAK SHARP EDGE
- 9 INSTALL FASTENER FINGER-TIGHT

646.3301
SHOWN EXPLODED

QTY	FIND #	PART #	DESCRIPTION	MAT'L	SPEC.
1	16	601.2834	BOLT	A192-16A	
15	15	601.2045	RTV, LOCITE 598		
15	14	601.2765	SCREW	A527039-08-19	
3	13	601.1624	LOCKNUT	A521045-13	
2	12	601.2763	BOLT	A52-12A	
6	11	601.1607	WASHER	A52114990332P	
15	10	601.1541	LOCKNUT	A521045-10B	
3	9	601.2766	RIVET	A522047-04-05-18	
30	8	601.2764	WASHER	A521149714032P	
1	7	646.3316	BLADE		
1	6	646.3315	BLADE		
1	5	646.3314	BLADE		
1	4	646.3313	UPPER GUIDE		
1	3	646.3312	CENTER PLATE		
1	2	646.3311	RH HALF		
1	1	646.3310	LH HALF		
1		646.3301	UPPER CUTTER ASSY		

PARTS LIST		APICAL INDUSTRIES	
NEXT ASSY (S)		2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA. 92056-3512 (760)724-5300	
646.4000		UPPER CUTTER ASSY	
ORIGINAL DATE 10/01/01 DRAWN BY S. HURP P. BRAVO CHECKED BY S. HURP DATE 08-26-02 CONTRACT NO.		SWF EXCH CODE B 071626 DWG. NO. 646.3300 SCALE NONE SHEET 1 OF 8	

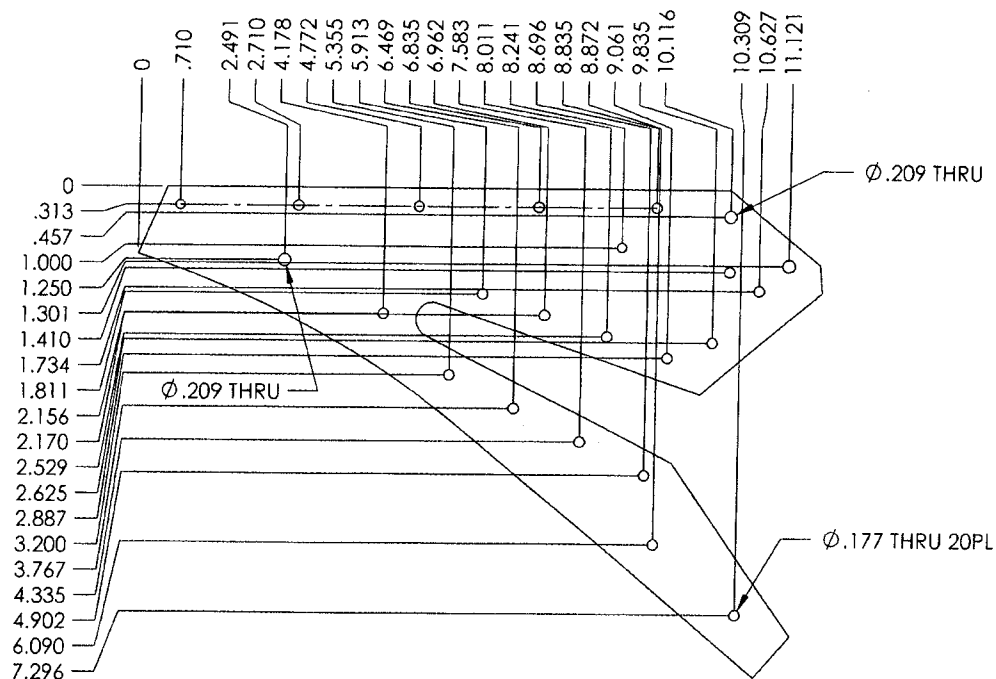
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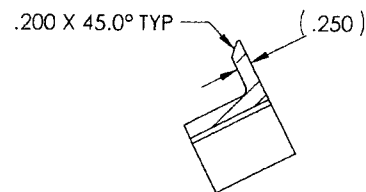
646.3310 SHOWN
646.3311 OPPOSITE

OPERATOR: DKL DATE: 06-26-00 DRAWN BY: J. BRAYO CHECKED BY: J. BRAYO APPROVED BY: J. BRAYO CONFIRMED BY:		APICAL INDUSTRIES 2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA. 92056-3512 (760)724-5300	
PARTS LISTED: 1. PARTS LISTED: 2. PARTS LISTED: 3. PARTS LISTED: 4. PARTS LISTED:		UPPER CUTTER ASSY PART NO: 646.3300 REV: N/C	
SCALE: NONE		SHEET 2 OF 8	

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SECTION A-A

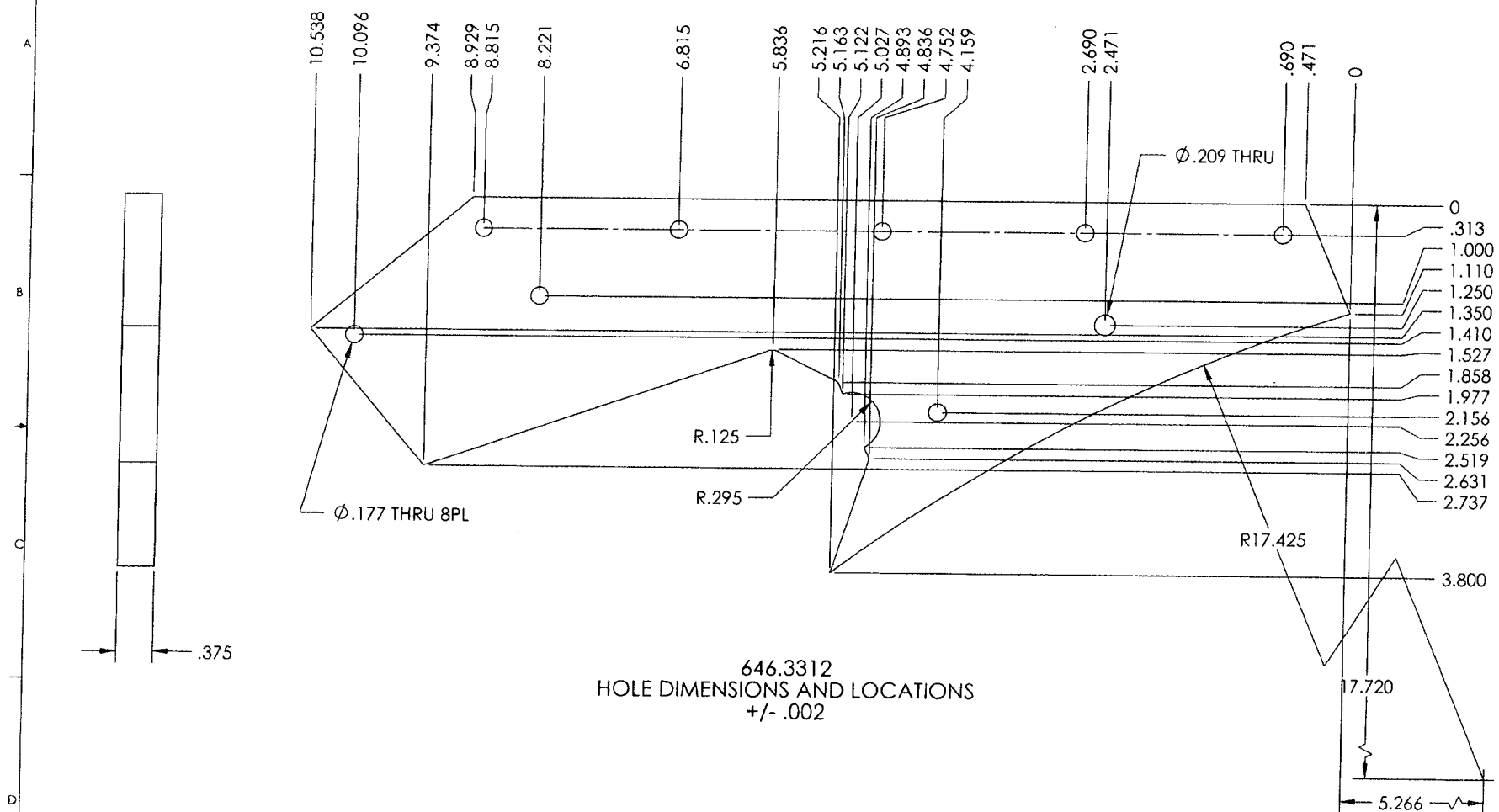


SECTION B-B

ORIGINAL DATE JAN 04 1991		08-26-91	
DRAWN BY	CHECKED	P. EYARD	
DATE	DATE	DATE	
CONTRACT NO.		646.3300	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 2 PLACE DECIMALS: ±.01 3 PLACE DECIMALS: ±.005 ANGLES: ±.5°		SCALE	NONE
APICAL INDUSTRIES 2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA. 92056-3512 (760) 724-5300		SHEET	3 OF 8
UPPER CUTTER ASSY		REV.	N/C

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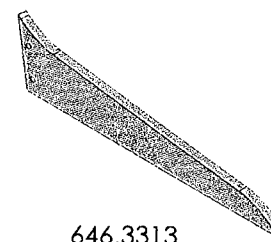
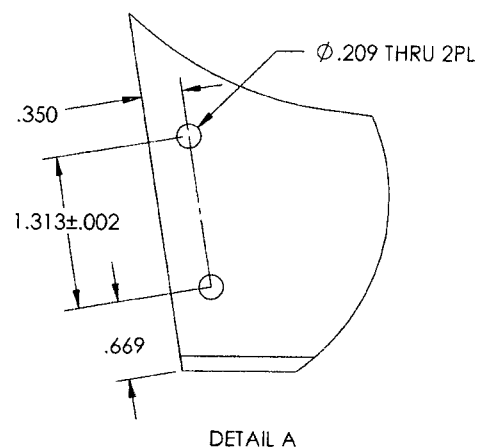
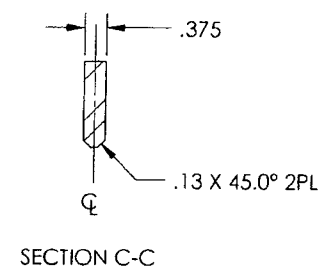
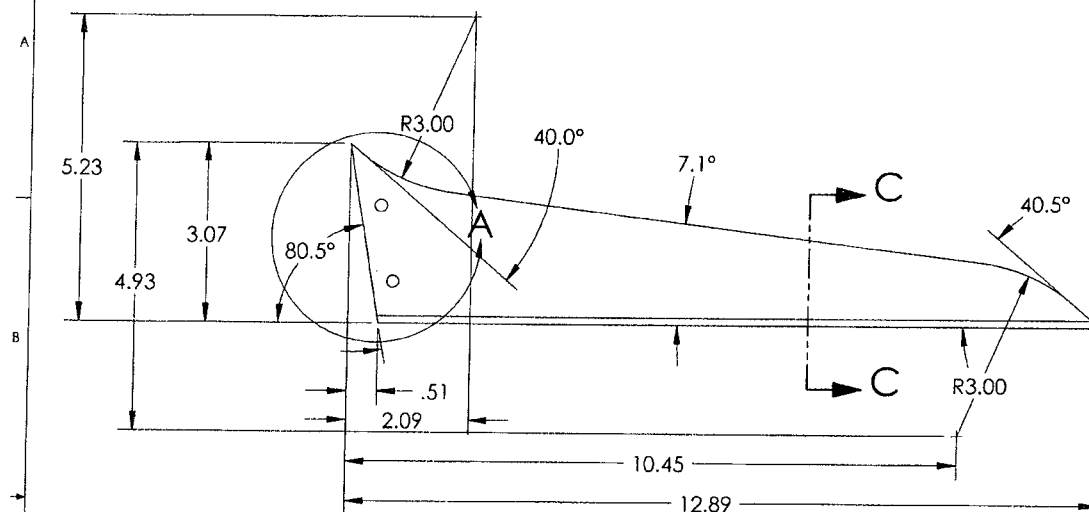
REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED



ORIGINAL DATE: 09-25-06 INVOICE NO: 09-25-06 DRAWN BY: J. HOFF CHECKED BY: P. BEAVO DRAWING APPROVAL: P. BEAVO DATE: 09-26-06 CONTRACT NO:		APICAL INDUSTRIES 2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA. 92056-3512 (760)724-5300	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES DECIMALS ARE: 3 PLACE DECIMALS ± .001 4 PLACE DECIMALS ± .0005 ANGLES ± .5°		SEE: CAGE CODE: 07M26 DWG. NO.: 646.3300 SCALE: NONE	REV: N/C SHEET: 4 OF 8

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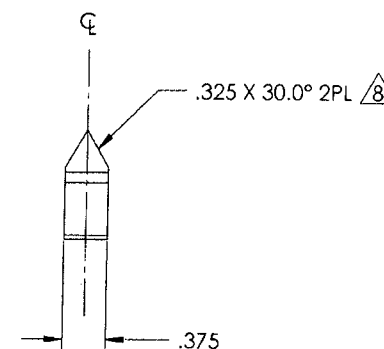
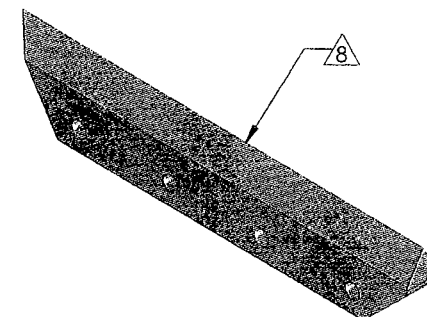
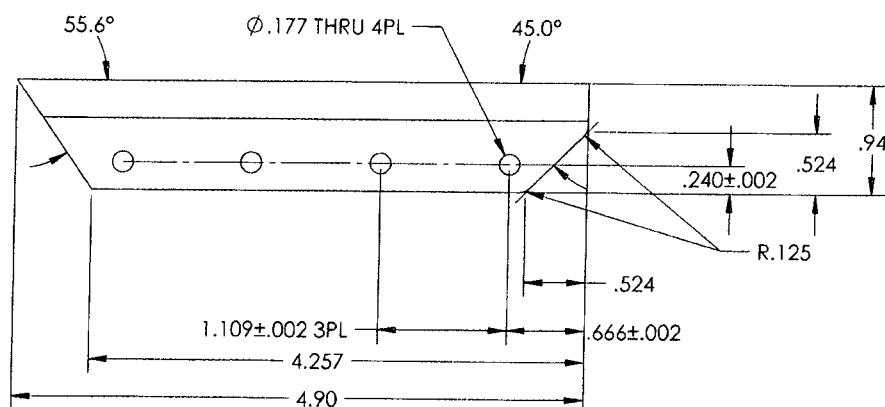
REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED



ORIGINAL DATE: 06-26-09 (IND. EM-18) DRAWN BY: J. HUFF CHECKED BY: J. BRAVO DRAWING APPROVAL: J. BRAVO 06-26-09 CONTRACT NO.		APICAL INDUSTRIES 2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA. 92056-3512 (760)724-5300	
UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES TOLERANCES ARE: 2 PLACE DECIMALS $\pm .01$ 3 PLACE DECIMALS $\pm .001$ ANGLES $\pm .5^\circ$		SHEET: B CAD: 07M26 SCALE: NONE	DWG. NO: 646.3300 REV: N/C SHEET: 5 OF 8

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REVISIONS			
REV	DESCRIPTION	DATE	APPROVE

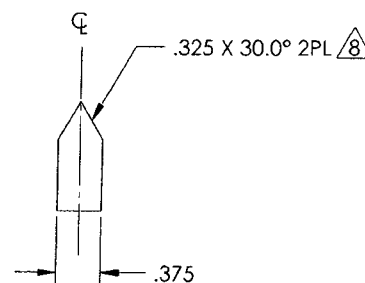
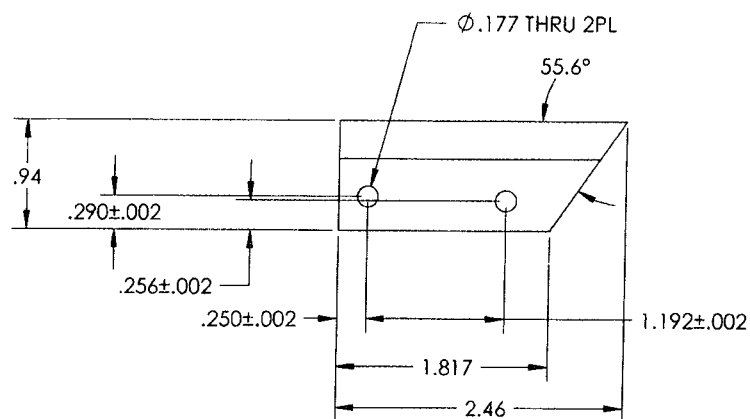
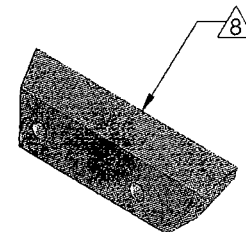


646.3314

ORIGINAL DATE REV. DA-171 08-26-08		APICAL INDUSTRIES	
DRAWN BY: CASC/FP		2608 TEMPLE HEIGHTS DR.	
1. HSB		OCEANSIDE, CA. 92056-3512 (760)724-5300	
DRAWING APPROVAL		UPPER CUTTER ASSY	
P. HANCO		REV	
08-26-08		N/C	
COTRACCT NO.		SCALE NONE	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 2 PLACE DECIMALS ±.01 3 PLACE DECIMALS ±.005 ANGLES ±.5°		SET CAGE CODE DWG. NO.	REV
B 07M26		646.3300	N/C
SHEET 6 OF 8			

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REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED

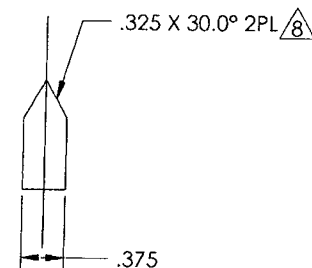
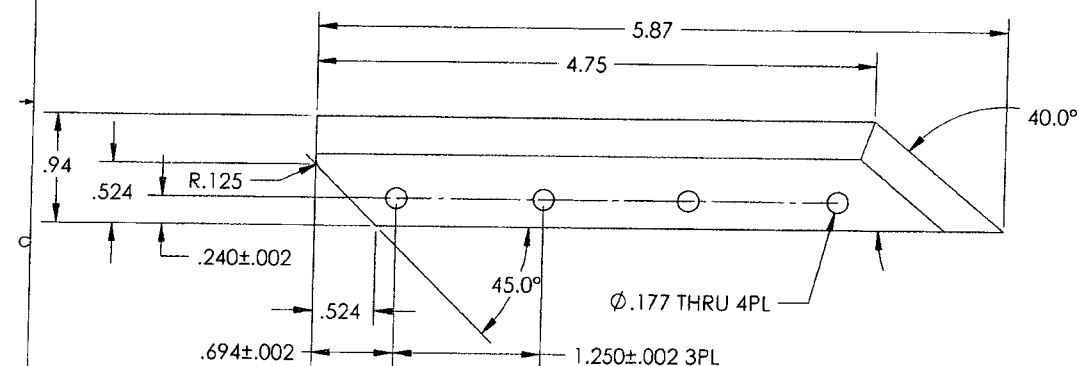
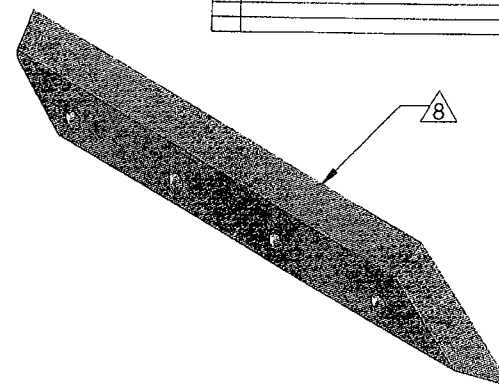


646.3315

ORIGINAL DATE (MM/DD/YYYY) 08-20-08 DRAWN BY S. HUFF CHECKED BY D. BRAVO DRAWING APPROVAL P. BRAVO 08-20-08 CONTRACT NO.		APICAL INDUSTRIES 2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA. 92056-3512 (760)724-5300	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE 2 PLACE DECIMALS ±.01 3 PLACE DECIMALS ±.005 ANGLES ±.5°		SEE B	DWG. NO. 07M126 646.3300
SCALE NONE		REV. N/C	SHEET 7 OF 8

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REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED



646.3316

ORIGINAL DATE 06-26-08		APICAL INDUSTRIES	
DRAWN BY S. HUFF		2608 TEMPLE HEIGHTS DR.	
CHECKED BY P. EBAVO		OCEANSIDE, CA. 92056-3512 (760) 724-5300	
DRAWING APPROVAL P. EBAVO		UPPER CUTTER ASSY	
CONTRACTING		SCALE NONE	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 2 PLACE DECIMALS ± .01 3 PLACE DECIMALS ± .005 ANGLES ± .5°		SHEET NO B 07M16	REV N/C
646.3300		SHEET 8 OF 8	

DART AEROSPACE LTD	Work Order:	136232
Description: LH Half	Part Number:	646.3310
Inspection Dwg: 646.3300 Rev: NC13		Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
7.296	+/-0.005	7.298	✓		31006	Height gauge
3.767	+/-0.005	3.767	✓			
0.457	+/-0.005	0.457	✓			
0.313	+/-0.005	0.314	✓			
0.710	+/-0.005	0.710	✓			
6.469	+/-0.005	6.469	✓			
10.116	+/-0.005	10.116	✓			
10.309	+/-0.005	10.309	✓			
Ø0.177	+0.005/-0.001	0.178	✓		—	gauge pin
Ø0.209	+0.005/-0.001	0.210	✓		...	...
0.250	+/-0.005	0.252	✓		118-120	Deep Trooth Mic
1.250	+/-0.005	1.253	✓		31006	Height gauge
R0.125	+/-0.005	0.125	✓		—	Radius gauge
3.513	+/-0.005	3.513	✓		31006	Height gauge
8.375	+/-0.005	8.372	✓		...	...
0.250	+/-0.005	0.247	✓		118-120	Deep trooth Mic
8.1°	+/-0.5°	8.1°	✓		—	—
11.689	+/-0.005	11.689	✓		31006	Height gauge
11.250	+/-0.005	11.250	✓		...	...
0.200 x 45°	+/-0.005	0.200 x 45°	✓		MIP-04	vern

Measured by: <i>[Signature]</i>	Audited by: <i>JH</i>	Preliminary Approval:
Date: 15/10/01	Date: 2015-10-02	Date:

Rev	Date	Change	Revised by	Approved
A	14.06.25	New Issue	KJ	<i>[Signature]</i>



A.T.G. Industries Inc.
731, rue Industrielle Rd.
PLATING DEPARTMENT
Rockland, On K4K 1T2
Canada

Ph: (613) 446-4544

Fax: (613) 446-4556

Pack List

Number: 63952

Date: 14-Oct-15

To

DART AEROSPACE LTD
1270 ABERDEEN ST.
HAWKESBURY, ON K6A 1K7
Canada

Ship To

DART AEROSPACE LTD
1270 ABERDEEN ST.
HAWKESBURY, ON K6A 1K7
Canada

Ph: 613-632-5200

Fax: 613-632-1185

Ph: 613-632-5200

Fax: 613-632-1185

Terms		Ship Via	
Quantity	Description		
7 ea	Part: D4824-1 UPPER CUTTER MOUNT HARD ANODIZE BLACK MIL-A-8625 TYPE III CLASS 2 PRIME MIL-P-23377J TYPE I CLASS N Job: 20150755	Rev: A PO: PO30057	Line:
8 ea	Part: 646.3310 LH HALF HARD ANODIZE AS PER MIL-A-8625 TY III, CLASS 2 PRIME AS PER MIL-P-23377J TYPE I CLASS N PRIMER IS SUPPLY BY THE CUSTOMER Job: 20150756	Rev: N/C PO: PO30057	Line:
8 ea	Part: 646.3311 RH HALF HARD ANODIZE AS PER MIL-A-8625 TY III, CLASS 2 PRIME AS PER MIL-P-23377J TYPE I CLASS N PRIMER IS SUPPLY BY THE CUSTOMER Job: 20150757	Rev: N/C PO: PO30057	Line: 15710/1480
Certificate of Conformance A.T.G. Industries certifies that all items in this shipment are in conformance with all requirements, specifications and drawings referenced in the purchase order. ISO 9001 : 2008 REGISTERED ATG SALES-2010 TERMS APPLY DATE: 14/10/15			



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID **PO30057**

Purchase Order Date 10/7/2015

PO Print Date 10/9/2015

Page Number 1 of 3

Order From :

VC-ATG001

Ship To : DART AEROSPACE LTD

A.T.G. INDUSTRIES INC.
731 INDUSTRIELLE ROAD
ROCKLAND, ON K4K 1T2
CANADA

1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

REVISED

Contact Name

Vendor Phone 613-446-4544

Buyer

Chantal Lavoie

Customer POID

Customer Tax #

10127-2607

Ship To Contact

Terms

Net 30

Ship To Phone

Currency

CAD

Ship Via: VENDOR'S TRUCK

FOB

FCA - (Free Carrier)

Ship Acct:

Line Nbr	Reference Vendor Part Number Line Comments Delivery Comments	Description/ Mfg ID	Req Date/ Taxable Promise Date	CD	Req Qty/ Unit of Measure	PO Unit Price	Extended Price
1	137369	D4824-1 UPPER CUTTER MOUNT REV. A	10/14/2015 Yes 10/14/2015		7.00	\$13.40	\$93.80
FINISH: HARD BLACK ANODIZE AS PER IAW MIL-A-8625 TYPE III, CLASS 2 / PRIME AS PER IAW MIL-P-23377J TYPE 1 CLASS N							
Line Total:							\$93.80
2	136232	646.3310 LH HAFT REV. N/C	10/14/2015 Yes 10/14/2015		4.00	\$18.10	\$72.40
FINISH: HARD BLACK ANODIZE AS PER IAW MIL-A-8625 TYPE III, CLASS 2 / PRIME AS PER IAW MIL-P-23377J TYPE 1 CLASS N							
Line Total:							\$72.40
3	136656	646.3310 LH HALF REV. N/C	10/14/2015 Yes 10/14/2015		4.00	\$18.10	\$72.41
FINISH: HARD BLACK ANODIZE AS PER IAW MIL-A-8625 TYPE III, CLASS 2 / PRIME AS PER IAW MIL-P-23377J TYPE 1 CLASS N							

Note:

10/9/2015